

The Man With Ideas

Internet: The Robert Moses of cyberspace plans a 1996 world's fair

By KATIE HAFNER

THREE YEARS AGO, CARL MALAMUD, an economist, writer and computer consultant, traveled around the world three times. In six months, he went to 56 cities and visited resident techies in each. Malamud saw that pieces of Marshall McLuhan's vision of a global village were actually falling into place. When he returned, he resolved to help make the circle complete.

A conspicuous, unstoppable force in the Internet community, Malamud is organizing perhaps the most ambitious undertaking on the Internet to date: a 1996 world exposition modeled on world's fairs of the past, with 100 participating countries. Funded by corporate sponsors and expected to cost about \$10 million to set up, with another \$10 million in donations of equipment, the fair will blend the physical and virtual worlds. The main entrance to the fair will be called Central Park—a huge World Wide Web site residing on eight computers spread around the world. The Central Park computers will be linked by a global, ultrahigh-speed electronic railroad. In addition, each participating country will have its own electronic theme pavilion. Throughout the year actual events, such as Peter Gabriel's World of Music, Arts and Dance concert tour next summer, will be broadcast over the Internet as part of the fair.

If anyone can pull this off, it's Malamud. At 36, he is the idea man of cyberspace. Malamud is perhaps best known among Internet cognoscenti for popularizing audio on the Net. In 1993 he ran up \$40,000 in debt on his credit cards to buy sound equipment and began producing weekly interviews with computer experts. He called the program "Geek of the Week." People could download interviews from the Internet, store them on their computers and listen to them later.

Malamud's broadcasts were a hit, with more than 100,000 listeners the first year. But they were data-intensive, which made them easily accessible only to people with very high-speed connections to the Net. Even using a relatively fast modem, it could take two hours to download a half-hour interview. Now, with applications such as RealAudio, a new audio format that makes listening to audio on the Internet nearly instantaneous, audio on



On the soundboard:
Malamud with mike

JOHN FICARA—NEWSWEEK

the Net is finally reaching the masses. "Geek of the Week" grew into Internet Multicasting Service, a not-for-profit "cyberstation." Malamud oversees a staff of six from an office above a Chinese restaurant on Capitol Hill in Washington, D.C. He gets his funding and donations of equipment from corporations such as Sun, MCI

Communications and disc manufacturer Quantum Corp. His annual budget is about \$1 million, and he estimates that there are about 250,000 regular listeners.

An intense workaholic, he is driven by a desire to create public spaces on the Internet as it grows increasingly commercial. He could just as easily start a commercial ven-

ture, but the prospect doesn't particularly interest him. "I couldn't do what I'm doing in a commercial company," Malamud insists. "I'm not beholden to investors or venture capitalists and I don't have to make a profit, which means I can do new things."

Malamud's peers in the computer industry generally speak glowingly of him. Some are puzzled by his lack of interest in making money. But everyone seems to be in awe of his creativity. "You never know what he's going to think of next," says Stephen Wolff, an engineer at Cisco Systems, Inc. "And like a lot of people who have terrific, huge-scale ideas, Carl's not always the easiest person to deal with."

Malamud inherited his technical bent from his parents—his father is a high-energy physicist, his mother a physiologist. He got his start in computers when, as a doctoral candidate in economics at Indiana University

in 1982, he complained constantly to university officials about the computers. "Finally they said, 'If you're so damn smart why don't you come work here?'" he recalls. So he dropped out of the program and helped design the university's computer network. Malamud's site on the World Wide Web (<http://town.hall.org>) contains more than 300 hours of audio. Visitors can listen to Robert Frost reading from his poetry, check in on a National Press Club luncheon or hear a recording of the recent United Nations 50th-anniversary celebration.

On top of the intensive planning for the world expo, Malamud has been engaged in a wrangle with the Securities and Exchange Commission over the SEC's federally mandated Electronic Data Gathering, Analysis and Retrieval system, or EDGAR. The database contains financial information on publicly traded companies. With a grant

from the National Science Foundation, last year Malamud put the database on the Net, making it accessible free of charge to anyone with a computer and modem. He's going to drop the project in October but hopes the SEC will keep the data in the public domain.

The world's fair will be Malamud's most daring project. Once it's over, he plans to dissolve Internet Multicasting Service, taking the assets and distributing them to different organizations on the Internet. With that, he hopes to create cyberstations similar to his, scattered around the world. Once Internet Multicasting has disappeared, Malamud says, he plans to return to writing books and consulting. But those who know Malamud aren't inclined to believe him. "That might last about three months," says one friend. Then he'll have another idea.

With TORIANO BOYNTON

Marconi Never Dreamed of Anything Like This

RADIONET IS A talk show that cyberjunksies in Santa Cruz, Calif., get up to hear on Sunday mornings. The two-hour live radio program features Internet news, advice for call-in listeners and chatter from computer celebs. Now highlights of the show can be heard everywhere, instantly, simply by clicking an icon on the show's World Wide Web homepage. Scott Deardorff, the show's 30-year-old resident techie—he digitizes the show for the Internet—gives his program the ultimate wired encomium: "It's a cool site."

Just four months ago this would not have been possible. RadioNet is one of several participants since April in a test of new software called RealAudio, a system that allows transmission of sound files over the Internet via a 14.4 modem and a regular phone line. (The final version for Windows PCs will be



RICH FRISHMAN

Audio on demand: Progressive's Glaser

available by the end of the month.) Created by Seattle-based Progressive Networks, RealAudio is a breakthrough. It allows users to listen to audio clips over a standard Internet connection in real time—without having to download the audio file onto a hard drive. Progressive's founder and president Rob

On the Net's Dial

A modem, a regular phone line and an Internet connection will let you sample these audio sites:

- **National Public Radio**
<http://www.realaudio.com/>
Broadcasts of "All Things Considered" and "Morning Edition."
- **C-SPAN**
<http://www.c-span.org/realaudi.html>
Announcement speeches for several '96 presidential candidates, including Dole, Specter and Gramm.
- **Carl Malamud's Internet Multicasting**
<http://town.hall.org/radio>
"Geek of the Week," Malamud's popular interview segment.
- **RadioNet Archives**
<http://www.radionet.com/foo.html>
The RadioNet talk show about cyberspace can be found here.

quested the software. In addition, Progressive has made deals with Netscape, Microsoft and Spyglass Mosaic to integrate RealAudio players into their Web browsers—a move that Progressive hopes will help establish RealAudio as a standard audio format.

Before this software was developed, downloading a 10-minute audio file could take as long two hours. Glaser's system allows instant play, as well as fast-forward, rewind and pausing features.

This software isn't just for radioheads.

Glaser, who left Microsoft to develop this product, says the idea is to "make audio on the Net ubiquitous."

Since its early release, Glaser says, more than 100,000 end users have retrieved from Progressive's Web site free copies of the audio "player" software, which decodes these sounds clips. And, 3,000 people who want to become RealAudio broadcasters have re-

Deardorff is using RealAudio for the Web homepage he created for his mother, Betty Jo, who recently moved from Fresno, Calif., to Cairo, Egypt. Deardorff says that he'll put up audio clips of his children—2-year-old Kaleigh and 5-year-old Aric—saying hello to his mom. Says Deardorff, "We're working on getting Grandma wired, too."

JENNIFER TANAKA